



**EPISODE 873**

# **The Truth About GLP-1: Foods That Increase It, What Blocks It & More**

**With Guest Dr. Taz Bhatia**

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**SHAWN STEVENSON:** Welcome to the model health show. This is fitness and nutrition expert, Shawn Stevenson, and I'm so grateful for you tuning in with me today. GLP 1. GLP 1. GLP 1 drugs have hit our society harder than just about anything we've ever seen. Harder than K pop. Harder than any boy band you can name. They're out here heavy. And the question is, what is the cost? And I'm not talking about economically to buy the drugs. I'm talking about what is the cost for our health? What is the cost? What is the cost for our society? And will this work long term? Well, the longest running study looking at the benefits and the potential downsides of the semaglutide camp of drugs, the GLP 1 drugs.

So we're talking about Wigovi, we're talking about Ozempic and the like. This study was published in the journal Diabetes, Obesity, and Metabolism and it was titled "Weight Regain and Cardiometabolic Effects After Withdrawal, After Withdrawal of Semaglutide". Now, this was a randomized trial conducted over a year looking at the weight loss and the metabolic effects of utilizing this class of drugs. And it worked really well. People lost weight, their cardiovascular, cardiometabolic numbers improved, but, and here's the big old but, that some people lost. In just a short amount of time after discontinuing the use of the drug. Participants began to regain their weight. In fact, participants regained two thirds of their prior weight loss with similar negative changes in their cardiometabolic variables.

And this happened again progressively after stopping the drug. And the trial actually stopped. Before we can even see that, yes, of course, many of the patients who utilized this class of drugs, they regained all of their weight that they had lost, and then some. Now, this happened in the majority of participants in this study, the longest running study that we have to date. So, what do we know? Yes, this class of drugs, it works very well. We also know that there are a plethora of side effects that can range from minor inconveniences to very severe things like complete gastrointestinal breakdown and distress, issues with cognitive function, issues with all manner of hormone function.

The list goes on and on. But for many, the cost is worth it because of what they get with seeing the changes that they want with their body, with their self confidence, with their body image. And also with improving, again, their cardiometabolic factors can improve

dramatically when you're no longer carrying around that amount of excessive body fat. And also what's coupled with that and why we see the improvement in the cardiometabolic factors is that our body fat tissue is one of the prime places in the human body that carries a significant amount of inflammatory potential. In fact, our body fat cells have the capacity to increase their volume.

We're talking well over a hundred times their size, being able to pack more and more energy, more excess into those type of cells. Now, when those cells start to get stressed, and start to get stretched to that capacity, it sends out a signal. An inflammatory response takes place because that distress signal, even though it might be a false distress signal in some ways, it's sending out a signal that our body is infected. Our fat cells are infected. This amount of volume is something that was abnormal in our design, in our evolution. We were never meant to be able to hold that much energy, especially for an extended amount of time. And so it's sending out this false distress signal We've got this inflammatory cascade this response of our immune system and then this is going on 24/7, every day of our lives. So being able to reverse that to let go of this excess that many people have been struggling with and fighting with her so many years. It can be freeing, psychologically, it can be freeing for our physical appearance and our health and the things that we want to do, and also freeing for different aspects of our health.

But the question is again, what is the cost? Because there is no such thing as a free lunch in this world, in this universe. We live in a universe of causality. There is cause. And there's effects. And so what we're experiencing right now is a paradigm shift where this class of drugs is now being touted as standard of care. If somebody's struggling with insulin resistance and or excessive body weight. Hey, it's as easy as taking this drug. Now it's integrating itself more and more, even into pediatric care and children who are experiencing insulin resistance and being overweight or obese, which those numbers have skyrocketed in our children.

And our society has done a very poor job of addressing the underlying cause and why this is happening to our children, why it's happening to us. And again, coming with a solution of a whole new class of drugs, this new multi, multi, multi billion dollar entity that has just

exploded. And so again, we don't want to negate the effects, but we want to look at, okay, before we get to this place, are we checking the other boxes for sustainability? If somebody does have a tryst with this class of drugs, what can they do to stack conditions in their favor so that this actually works for them long term? Should we be jumping right to that? Should we be jumping right to that amount of medication that's being prescribed? And an even bigger question is, what's causing the dysfunction with GLP 1 in the first place because this is something that our bodies make.

What's creating the dysfunction where we're not making it or not making as much as we are designed to do. And also what about the receptor sites? What about the other hormones that are interacting? And also GLP 1 is not the only one of our powerful satiety hormones that our bodies have, we're going to be talking about all of that and much more today. And we're also going to be talking about four specific foods that target GLP 1 naturally in our bodies. It turns it up, it turns the volume up on our GLP 1 production. So again, we're going to talk about that and so much more with our special guest today. Now, one of the things that really surprised me about what's creating this dysfunction with GLP 1 and our body's natural production of it. Our special guest, one of the leading physicians and practitioners and educators in this field.

She mentioned how our sleep quality is creating dysfunction with GLP 1, which was, again, I was surprised. I knew this, but I was surprised that she brought this up and specifically mentioned it in association with GLP 1. So what do we do when we got chronic sleep issues, and then we've got chronic weight issues, and we're taking medications for this, and we're taking medications for that, and we become a glorified, walking, talking, CVS. And not really addressing these issues at their core. So, yes, there's a tremendous amount of medications now for improving our sleep quality. Well, let me not say sleep quality, our sleep duration. Because what it does, drugs like Ambien and that class, you know, this category of narcotics that are designed to essentially, you know, knock us out.

They do not, in any form or fashion, help us to go through our sleep cycles efficiently. If anything, they blunt them and deeply disturb them. And this is why many people wake up feeling tired. Whether it's through looking to drugs like this or just poor sleep hygiene overall.

So we want to address what's creating the dysfunction with our sleep in the first place. Absolutely. Check the boxes of making sure we're getting in plenty of good sleep nutrients in our diet, of making sure that we are addressing the light pollution and things that can disrupt our circadian rhythm, making sure that we're getting some time off of our screens before we go to bed because we know that, that shoots up cortisol and it literally suppresses melatonin.

It literally suppresses our melatonin production. So check in those boxes. And if we want to add something in that supports our sleep specifically through our nutrition, let's go with a softer touch. A more gentle approach, things that are time tested but backed by science. Things like chamomile tea, things like utilizing some magnesium supplementation, and my favorite thing personally that I've utilized for years that I love to do several times through the week before bed to help to support good sleep, but just a great wind down process, but it has other benefits outside of sleep as well, and that is to have a cup of reishi tea. A recent study published in the journal BMC Microbiology sought to uncover why Reishi medicinal mushroom appears to improve our sleep quality, even for individuals with insomnia. But without all of the well documented side effects that happen with conventional sleep medications. The study was titled "Exploration of the Anti Insomnia Mechanisms of Reishi", and it looked at how Reishi impacts changes at the genetic level to bring about improved sleep quality.

We're not talking about just sleep duration, but the quality of our sleep. The researchers found that Reishi affects target genes in our bodies related to our pineal gland, our amygdala, our prefrontal cortex, our cerebellum and other regions to create what they termed rhythm related physiological processes. Reishi helps everything to work better for these parts of your brain and nervous system to sync up and to take you through your sleep cycles more efficiently, not by force, by balance. And to top it all off, Reishi is one of the most well studied medicinal mushrooms for improving the function of our immune system, our cognitive function.

It's also deeply related to longevity and the only Reishi that I can recommend that I've been utilizing for years is a dual extracted Reishi tea. It's a Reishi elixir from the folks at Four Sigmatic. Go to [foursigmatic.com/model](https://foursigmatic.com/model). That's F O U R S I G M A T I C.com/model, and you're

going to get hooked up with 10 percent off. They're reishi elixir, but also they got a reishi hot cocoa and they've got a plethora of other dual extracted medicinal mushroom beverages like coffees, again, hot cocos and teas, elixirs like this wonderful Reishi tea. It's the calm elixir from Four Sigmatic. So again, head over there, check them out, [foursigmatic.com/model](https://foursigmatic.com/model) for 10 percent off. And now let's get to the Apple podcast review of the week.

**ITUNES REVIEW:** Another five star review titled "best Apple podcast" by Rebecca. I have learned so much from this podcast. Shawn has not only educated and up to date on all of the latest health information, but he also delivers it in a personable and entertaining way.

**SHAWN STEVENSON:** Thank you so much. That's what it's all about. Thank you for seeing me and seeing my heart. I appreciate that so very much. And if you have to do so, please leave a review over on Apple Podcasts. Let the podcast universe know what The Model Host Show is all about. That as Rebecca stated, it's the best apple podcast. All right. Share your voice. I really do appreciate that. It means the world. And without further ado, let's get to our special guest and our topic of the day.

Dr. Tasneem Bhatia, better known as Dr. Taz is a board certified physician, specializing in integrative and emergency medicine, pediatrics and prevention with expertise in women's health, weight loss, and nutrition. She's the author of several best selling books, including The Hormone Shift and The 21 Day Belly Fix. She's been featured on nearly every major media outlet that you can name, including The Today Show, Access Hollywood, Good Morning America, and the list goes on and on. She's also a contributing editor to Prevention Magazine and an assistant professor at Emory University. Let's dive in this conversation with the one and only Dr. Taz. All right, we've got the wonderful Dr. Taz back here in the studio with us to hang out. How are you doing today?

**DR. TAZ BHATIA:** I'm great. Happy to be here with you.

**SHAWN STEVENSON:** Of course, of course. You already know this, you know, you being a practitioner and working with patients every day and seeing this huge wave of GLP 1 drugs hit in the market.

**DR. TAZ BHATIA:** Yes.

**SHAWN STEVENSON:** And the response, it's been different depending on people's perspective. But one of the things that's overlooked I think is that this is just kind of hitting one note of what the human body can do. Right? So this is just one of the many satiety hormones we have, you know, we've got CCK, we've got peptide YY, we've got obviously leptin, adiponectin, the list goes on and on. We'll talk more about this as we go on, but GLP 1s do a specific job and they, and they do it very well. Can you talk about first and foremost what GLP 1 actually does?

**DR. TAZ BHATIA:** Absolutely. So first of all, we have GLP 1s, right? It, that's a natural hormone and it's involved in appetite regulation and it's specifically is involved in bringing blood sugar levels down. So we eat a meal, we want insulin to be secreted. It helps us to lower the amount of sugar floating around in our bloodstream that prevents us from gaining weight or having a lot of issues with stored belly fat and things like that. But at some point for so many people that wiring or that system or feedback goes off, you know, and we can talk about that too in just a second.

So we naturally produce this hormone, GLP 1, but because over time it changes and it's not as responsive, many people start to lose their natural activity of GLP 1. So GLP 1 medications are essentially trying to mimic that hormone. Now, some of the medications are not just, they have GLP 1, but then there's a second hormone involved too, which we can get into when we talk about all the different medication types that are out there.

But they're paired with the GLP 1 hormone and another hormone called GIP, G I P, which is also involved in blood sugar regulation and movement of food through the intestine. So That's kind of like the short version of what a GIP is, but essentially it's a gut hormone. It's the simplest way to remember it. And there are many other gut hormones, but it is one of the predominant gut hormones involved in this whole conversation around blood sugar and insulin and belly fat and weight and so much more.

**SHAWN STEVENSON:** Yes. I love this. Okay. So, GLP 1 has multiple roles. Primary one being helping with blood sugar.

**DR. TAZ BHATIA:** Correct.

**SHAWN STEVENSON:** But also slowing down the digestion of food.

**DR. TAZ BHATIA:** Definitely.

**SHAWN STEVENSON:** But also pairing it with this other one, the GIP.

**DR. TAZ BHATIA:** GIP, yeah.

**SHAWN STEVENSON:** This one is going to slow things down, I believe, a little bit more, so that combination. And so, what we already know is coming down the pipeline is going to be combinations of these different peptides and different chemical complexes to address the different satiety hormones, to address what's going on with the gut, the digestion of food.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** And also, and this is the other big point, it's communicating with your brain.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** So let's talk a little bit about that because there's this gut brain information superhighway. And a lot of our desires and our satiety, we don't necessarily feel it like, Oh, my stomach's empty. It's a head thing.

**DR. TAZ BHATIA:** Well, it's all interconnected. And, you know, I've talked about that, you know, so many times, but I think it's really interesting. If you look at the history of weight loss, let's just go back for a second. I don't know if you remember the stimulant drugs, right? Like the fen fens and the fen ter means and those type of drugs. Exactly. Ephedra is another one.



Right. And, it's interesting with the GLP 1s because we're kind of seeing the same thing even though this class of medication is very different. But Phentermine and that entire class of drugs actually did work more on your brain than it worked on your gut. And the thought was like, Oh, if we can, you know, cut hunger down and cut cravings down, people would lose weight.

And they did. But the minute they stopped that medication, all those sort of dopamine, serotonin neurotransmitters, all of those things that were out of balance, it happened right away again. Now we have the GLP ones that don't act on the central nervous system. They're actually acting on the gut. So the school of thought was like, okay, we're going to act on the gut now and it's going to take away the cravings and all these different things that happen. And again, when we start to chop up the body and divide it into all these different little pieces like, like you've got your head walking around over here, your gut's going over here, your heart's over there in the corner, you know, it is a short win and it will always be a short win because we know the gut and brain are connected.

We know that gut and inflammation are connected. We know the gut, liver and brain are connected. We know they all work together and they work together in a number of different ways. They work together because the microbiome, that sea of bacteria that live in the gut are influencing what's happening in the brain. We also know the microbiome is responsible and plays a central role in the production of neurotransmitters like dopamine and serotonin. I think like up to 80, 90 percent of your dopamine and serotonin is actually made in your gut, not made in your brain. But your brain is influenced by that and is going to make decisions based off that, right?

We know that the microbiome is influencing your hormones and your hormones are influencing your brain, right? If you lose estrogen or progesterone or testosterone, we know that the brain completely changes. So again, I think the fallacy, whether we go back to fen phen and ephedra and phentermine or we go into these GLP 1 medications. It's that these guys aren't talking to each other. And what we understand about the body and about health and what I'm so passionate about with this holistic approach to health is that we've got to remember it's all interconnected. And if we don't really start to spend the time and the

energy understanding those connections, we're going to continue to have short wins and short gains. And we're going to keep coming back to the same starting point over and over again.

**SHAWN STEVENSON:** Yeah. That's so well said. You know, for a lot of people, the average person, especially watching commercials today, they're going to think that GLP 1 is something exogenous, like this is a new thing.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** You know, but the truth is, this is just, just something that we discovered that the human body does, you know, a little bit more recently. And like I said, there's a cascade of different satiety related, metabolic related hormones, neurotransmitters, all this stuff. And I want to talk about something you said earlier, which is so profound that we don't think about, which is This is something that our bodies do.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** You know, we make GLP 1, we make adiponectin, we make leptin. We also make other stuff that makes us hungry like ghrelin, for example.

**DR. TAZ BHATIA:** Right. I love that you know your hormones. This is amazing.

**SHAWN STEVENSON:** We got some stuff to say.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** Coming up here. But, you know, you mentioned how this experience, this feedback, this interconnection, this communication in the body can degrade over time. And with this being said, The question is why? You know, why is this degrading so rapidly in our culture now? Because if you look at certain cultures sprinkled throughout the globe still they don't run into these metabolic challenges as people are getting into more advanced age and It's extremely rare. And so my question is what is it about our lifestyle? That's gumming

up this connectivity, this communication with our hormones, with the production of our hormones, with that feedback, because it's not just the hormones, it's the receptor sites and all this different stuff. So what is What is making us more susceptible to degradation, especially degradation long before our time?

**DR. TAZ BHATIA:** How much time do we have? So one thing to understand is that unfortunately this used to be a conversation just about over 40 over 50 over 60 right advanced age middle age. It's actually a conversation about our children as well. And they're actually glp1 medications out there targeting kids and pediatricians are prescribing them because children are losing their natural GLP 1 activity also. So why are we losing this activity, which we should be having, we should be working well into our 60s or so, you know, maybe even into our 70s, you know, and this is where we have to pull back and, you know, think through all the different variables. And there's some that are actionable and that we can make a change right away.

And there's some that might need a little bit more work and a little bit more thought. I think universally we have to all agree that the primary trigger of this occurred and happened when we changed how we grow our food, source our food, prepare our food. And eat our food. And so with and I think we can tie it all the way back. It was interesting. I was watching some documentaries on, you know, the industrial, the industrial, you know, revolution and when cereal first came out and when frozen vegetables first came out and all these different things. And you can kind of put a time stamp, you know, of about 50 years after that is where we really started to see changes in blood sugar and insulin regulation and the manifestations of that. So food quality, I would say is number one. But food quality is yes the food you choose to eat on a day in and day out basis. But I think people are pretty fatigued about hearing about that. But it's also even when we're trying to be organic and clean and healthy and all these other things. You know at least 80 percent of the time because everybody's human, you know, just the basic quality of what our food has, the nutrients, the microbial content of the food because the soil is now depleted, you know, there's so many factors we have, you know, glyphosate and even in the cleanest foods nowadays, even in organic foods, there's cross contamination.

So we're looking at the byproduct of now over 100, 150 years, actually longer, right? Almost 200 years of industrialization of food and of big food and our understanding that that has been a primary player in what's happened to everybody's microbiome and what's happened to their gut health, what's happened to the gut brain connection hormones and so much more. So that's one kind of hooked up into that. Is a similar idea of the toxic load, right? And that, too, has steadily increased over the last hundred years or so until today we, you know, are really being forced to understand and reckon with the fact that it is impacting what our body's doing with appetite, with the microbiome again, with inflammation, with so much more.

So that's probably a second really big factor. I think that the third, you know, modern day, maybe in the last 20, 30 years is our electronic exposure. You know, and there's so many, you know, anecdotal studies about this, but I think you're going to see that come out more and more as a factor that is playing into disruption of sort of GLP 1 regulation, our loss of it and more. I mean, I can tell just a quick personal story. Like we, I spent a ton of time in front of the computer, whether it's writing or charting or thinking or whatever it is. And I noticed that, you know, on some of those computer days when I'm not up and active and seeing patients, you know, over and over again, I would get like snacky is probably the best way to describe it.

Like, I want salt. You know, I want something crunchy. I started wearing blue light glasses and put a blue light blocker over my computer. All of that went away. So there's something about light and the wavelength of light that's impacting our hormones, starting with the pineal gland and then going all the way down to our gut and our brain and so much more. And then I think the fourth, and I'm trying to limit myself here, but I think the fourth word, big bucket is always the elephant in the room and a word that I feel like is just overplayed a little bit. But stress and cortisol definitely influence a lot of the degradation of our hormones and cortisol is relative and it's really a reflection of different things.

So for some people, you know, another really fascinating study I looked at recently was that nowadays embryos in utero are exposed to more cortisol than before leading to a lot of what I see in practice more and more PCOS or androgenization right of our girls or estrogenization of our boys. But a lot of that's happening right at, you know, conception or in utero because

cortisol levels are high across the board. So this idea of where is this coming from? Is it, you know, is it again, people aren't sleeping, they're super stressed. We have a modern age where we can stay up. 24 hours a day. We're always connected. Is it generational trauma? Is it immediate trauma? Like all these ideas are wrapped up into cortisol and our body's inability to truly rest, reboot, and reset the hormone axis. So to me, those are like your four really big buckets of why this is happening and what's taken place and why we're just seeing an epidemic, you know, across the board and across ages. when it comes to metabolic health, obesity, and all the other sort of sidebars of those two major diagnoses.

**SHAWN STEVENSON:** Yeah, thank you. I had no idea you're going to hit those last two. This is so important today.

**DR. TAZ BHATIA:** Yeah, very!

**SHAWN STEVENSON:** And again, a lot of people don't think about it because it's normalized.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** You know, we're just in it. We have this relationship with technology now that it's new. It's new for us. It's only been a couple of decades.

**DR. TAZ BHATIA:** We don't know the fallout.

**SHAWN STEVENSON:** We don't even know.

**DR. TAZ BHATIA:** We don't know yet.

**SHAWN STEVENSON:** We don't even know. We've got plenty, plenty of data.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** And just to go back, it's, it's really affirming gLP 1, which is the focus right now. It's not operating in a vacuum. There's all of this other Incredible hormonal chemistry taking place and cortisol is going to be playing a part here.

**DR. TAZ BHATIA:** Totally.

**SHAWN STEVENSON:** There's gonna be an interaction. There's gonna be an interaction with serotonin, with adrenaline, the list goes on and on. And being on our devices, we know, as you mentioned, it's the light and what it's doing. This goes back to a huge point for us, which is It's the circadian rhythm.

**DR. TAZ BHATIA:** Yes.

**SHAWN STEVENSON:** This is one of the primary, when we eat and our light exposure is controlling the expression and release of pretty much all of our hormones. They're happening on the circadian clock. Now of course there's stuff we can do at different times. If we lift some weights, we're going to change what our hormones are doing. If we, you know, if we, if we take a nap or whatever the case might be, if we get really stressed. But for the most part your body's always looking to sync up with the 24 hour solar day.

It's always looking to sync up with life. And so even with GLP 1 and other satiety related hormones, our bodies have a propensity to produce certain things when we've evolved to be eating at these times, right? And so what if we're, our body's clock is thrown off and we're literally up eating late, right? Chances are things are not gonna work the same way that they do if you're eating at different times and if you have a healthy light, light hygiene.

**DR. TAZ BHATIA:** Well, I mean your light is. You know, I think the future is light, by the way. I think we're going to understand more about light and light frequency and what that's doing, and there might even be light therapies. I know some are already out there, but I think we may get more advanced with that because it is influencing us at many different levels. And, you know, I would be excited if we start to, you know, be able to say, okay, your light frequency is here, here's what we need to do about it, it's impacting you in all of these ways, you know. this is actually the starting point

**SHAWN STEVENSON:** Mm hmm. So whether it's light or whether it's other inputs, it's understanding. This is a big takeaway for everybody today, which is GLP 1 or any of our other satiety related hormones. They're responding to certain things, right?

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** It's responding to a signal. And so if everything is working well and efficiently and we're eating maybe certain foods avoiding other foods, your body's going to be producing GLP 1, for example, in response to a certain signal, right? And so this leads into the conversation of what are some of the signals that we can give ourselves so that we can start to healthfully produce GLP 1. But it's not just the production of it. It's not just the injection of it. It's also your body's responsiveness.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** To the thing as well, but we're just going to focus on what are some of the foods that we can eat that can encourage this production naturally.

**DR. TAZ BHATIA:** I mean, I think that's the good news, right? Like we, we talk about all the change that's taken place over the years. We talk about kind of the situation we're in environmentally or ecologically and all these different things. But the good news is that there are actionable things to do. Food is a big part of that conversation, right? Some of the foods that help you naturally produce GLP 1 include things that have a lot of protein in it. So we're talking about eggs, we're talking about lean meats, even dairy, if you can tolerate dairy. These are foods that help with producing GLP 1s. The second piece is looking at foods with a lot of fiber.

And so fiber helps with GLP 1 production because fiber does exactly that. It slows down how quickly things are moving through your gut and through your intestinal tract to help you absorb the nutrients a little bit better and steady your blood sugar rather than experiencing these super highs and lows that blood sugar will go through when you're eating, you know, more processed foods or foods without protein or foods without fiber. So we know, you know, high fiber fruits and vegetables. We know lentils, you know, the bean family seeds. These are

all things that will naturally help you to produce GLP 1 without a medication, and they work. So many people will put their heads down and put a lot of energy into, am I getting the right amount of protein and the right amount of fiber in a given day?

Am I spacing that out throughout the day appropriately? Because again, I know we've sort of gone up and down with the trends around fasting and you know, all of that stuff. But at the end of the day, what the body really needs, how we evolved was to eat in very clear intervals, not to snack and graze all day. So blood sugar is going up and down, up and down, up and down, but to have a clear time to eat a clear time to digest and then to do that all over again, you know? So I think, you know, those are some of the behaviors we can put into place and some of the choices we can make around food that. You'll see a difference right away. You know, I mean, just adapting and looking at your food and being like, am I getting the right amount of fiber?

Am I getting the right amount of, you know, protein can help you to naturally produce GLP ones. And I would say this really applies again, across the ages, I mean, seniors who start to lose their appetite. Just on their own, but they don't get the protein. They don't get the fiber they need. So what happens, they end up having a lot of stored fat or belly fat. They're skinny fat and low muscle because they are just not hungry and don't want to eat that. Then we look at the other end of the spectrum. We look at our children, right? You know, whether it's our toddlers and our preschoolers and our high schoolers and all of them and their diet is not high in protein and it's not high in fiber across the board.

So they're experiencing some of the same fallout that comes with reduction in GLP 1 and they're medicating that over and over again by reaching for more, more sugar to get that blood sugar back where it needs to be, you know, more processed foods. So they ride that high and low and it looks different on them. They're experiencing more of the sensory issues and the focus issues and the cognitive issues and now we're seeing younger and younger incidences of autoimmune disease and cancer and all the other diseases. You know, and then there's the rest of us And, you know, it might be changes in our weight, changes in our mood, changes in our hormone levels, but there's so many different ways that plays out.



So simply starting with, am I eating consistently? Am I eating about every 4 hours or so? Do I have enough of a fasting window around 12 hours that allows food to digest? Am I getting protein and fiber at every one of those intervals? And choosing these high GLP 1 foods, if that's what we want to call them, right? The protein coming from eggs and meat and even, you know, a good source of dairy. If you can tolerate dairy, you know, beans and lentils and seeds and stuff like that. And then fiber also coming from beans and lentils and seeds, but high fiber fruits and vegetables. That's a recipe for starting this journey even before you think about a medication.

**SHAWN STEVENSON:** Yeah. One of the foods, you know, your team sent me over a video and you were talking about a food that checks a lot of these boxes, you're talking about avocados.

**DR. TAZ BHATIA:** Oh, yes, that's a great one. You've got the fiber, you have healthy fat. That's going to help us with the GLP 1 conversation.

**SHAWN STEVENSON:** Yeah. Now, here's the thing you didn't know, and so we're going to collab on this.

**DR. TAZ BHATIA:** Okay.

**SHAWN STEVENSON:** 2019.

**DR. TAZ BHATIA:** Mm hmm.

**SHAWN STEVENSON:** 2019, I wrote my book, Eat Smarter, and it came out in 2020. And I'm grateful, you know, it's a national bestseller, all the things, but in it, I talked about GLP 1.

**DR. TAZ BHATIA:** Mm hmm.

**SHAWN STEVENSON:** 2019. You know, and this is.

**DR. TAZ BHATIA:** You were ahead of the curve.

**SHAWN STEVENSON:** I'm not clairvoyant. I don't think.

**DR. TAZ BHATIA:** You were ahead.

**SHAWN STEVENSON:** I didn't know that this would be such a big part of our culture. And of course, I talked about GLP 1. I talked about CCK. I talked about peptide YY, adiponectin, the list goes on and on. And directing people towards, oh, there's this other thing. It's not just leptin, which is what I was taught in school.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** In my conventional university, we did, we did hear about leptin and ghrelin, which was cool. But there's so much more because we like to look at like, And this hormone does this, this does that, end of story. And so one of the foods that I talked about, and this is directly from the book, was the wonderful avocado. And this was published in the journal Nutrients, and we'll put the study up for everybody to see. And they had study participants to replace some of their dietary carbohydrates with some avocado instead. And after analyzing their biomarkers, the scientists found that calorie for calorie adding in some avocado improved their blood sugar levels, increased levels of satiety hormones, PYY, and GLP 1.

**DR. TAZ BHATIA:** There you go.

**SHAWN STEVENSON:** And overall, higher levels of subjective satisfaction and reduced hunger for longer periods of time.

**DR. TAZ BHATIA:** Ding, ding, ding. I mean, I'm not surprised. You know, we could talk about avocados for a bit too, but avocados, not just the fiber. It's the healthy fats, but all of that is helping with bile salts and a big part of the gut equation, right, is making sure you're producing bile. You're emulsifying bile, bile is produced from the gallbladder. We need it to regulate the very same hormones you're talking about. And when we went to a calorie in calorie out mentality and thinking that every calorie was equal, right, and quality did not matter.

That's also where we got into a lot of trouble, you know, because as your study shows, something like avocado, which everybody thinks is fattening or highly caloric is actually helping, you know, with the whole blood sugar hunger equation and it's doing so at multiple levels. Fiber, fat, bile, salts, all of it.

**SHAWN STEVENSON:** Yeah. And I remember, you know, in school, in my, I. Nutritional science class and you know, the saturated fat paradigm was super scary sketchy at the time. And this fruit which avocado was a fruit had all this saturated fat as well, you know comparatively to other stuff.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** And I was just like this is not good for you and people eating guacamole out here and just if you think about just a healthy fresh made guacamole. You know, it's got a couple of, you know, some onions and garlic and tomatoes, whatever the case might be, some spices, a little salt, some lime juice or lemon juice. And none of that is like throwing off a red flag. And I think that it's probably more so related to what we do with the guacamole.

**DR. TAZ BHATIA:** Right, all the chips that go with it, right? That might be the story.

**SHAWN STEVENSON:** You know, Doritos or whatever you want to get freaky instead of just the regular tortilla chips. You can go, you know, with some pizzazz on the chips. But it's that part. And also, you know, I just again, I think it's the education around it. And. And for me, growing up in an environment where I didn't, it's like certain foods, like we just didn't eat. Like I, I never saw, I literally never saw an avocado until I was an adult. I never saw it.

**DR. TAZ BHATIA:** I believe you. I believe you.

**SHAWN STEVENSON:** Right? And so once I, the first thing when I saw guacamole, I'm just like, where the hell did that even come from? That just looks gross. But now it's like one of my favorite things.

**DR. TAZ BHATIA:** I mean, there are areas of the country, you know, and I've been in them for different things. There's not a lot of option in the fruit or vegetable aisle. There's some basic fruits and some basic vegetables. So they, there truly are this idea of food deserts, that's real. And then in other areas of the world, you know, they experience that in a different way. And while they may have access to some of those foods, the processed foods are actually cheaper, you know.

So, People are making decisions based on their wallet. They're making decisions based on culture and what they learned. I don't think, you know, I have a, we've talked about this before. I have teenagers and I think even with them, they're still in the calorie in calorie out mentality thinking that that's "healthy", you know? So I still think we have a lot of work to do in terms of educating everybody on, on really what a good choice is, what does it look like? And then how to navigate. the community and the culture that we all live in.

**SHAWN STEVENSON:** This reminds me of, you know, a little bit later on after getting myself healthier, I start to see more of the options around. I had to be creative.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** But it reminds me of the power of demand. Right?

**DR. TAZ BHATIA:** That's a good one. Yeah.

**SHAWN STEVENSON:** And once the public awareness went up for certain things I remember there was suddenly an organic aisle.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** At the grocery store that had all these curated organic foods. Not necessarily that they're super healthy or better. You know, it's organic pop tarts or something.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** Something like that. But then there was like also more organic produce and things like that as well. But it's just because of the awareness went up, the demand went up. So the growth the grocery stores and food manufacturers they start to change what they're doing as well.

**DR. TAZ BHATIA:** Which is great I think it's amazing. I've been in this 15 20 years and you know, I've been kind of witness to the change, right? It's been incredible to see Organic become normal, you know many of these ideas start start to become, you know, something that everybody's seeking I think though again at a Policy level at a higher level, there's still a lot of work to do.

**SHAWN STEVENSON:** Yeah, of course. Got a quick break coming up. We'll be right back.

If you want to dramatically reduce the frequency of you getting sick and accelerate your recovery, if you do, I want to make sure you and your family are utilizing what was highlighted in a meta analysis, publishing the annals of clinical biochemistry. The study was titled "Electrolyte Imbalances in Patients with Severe Coronavirus Disease", and it analyzed five studies with nearly 1500 patients with COVID 19 and found that both sodium and potassium were significantly lower in patients with severe COVID 19, and improving people's electrolyte balance dramatically improved their recovery. Now this is known in the hospital setting, but we don't need to be severely ill to get the immune system support of electrolytes. In fact, a peer reviewed study published in the European heart journal titled "Sodium Intake, Life Expectancy, and All Cause Mortality" revealed, "observation of sodium intake correlating positively with life expectancy and inversely with all cause mortality. Shocking to the researchers and the scientific community at large, higher sodium intake than conventional beliefs about sodium is associated with a longer average life expectancy and reduced all cause mortality".

And this was a huge meta analysis, by the way. This is the data from 181 countries, but the question should be why? Well, sodium is required to help conduct impulses of your nervous system. It's required for muscle contractions. It helps all of our cells, tissues, and even your brain maintain proper fluid balance. It's deeply involved in every aspect of our immune

system function, the generation and utilization of energy, and the list goes on and on. But the most important factor is getting the right ratio of these key electrolytes, sodium, potassium and magnesium. And that's what you get in the number one electrolyte supplement in the world.

It has no sugar, no artificial dyes and results that you notice. And right now, not only can you try their popular drink mix that's now being used by dozens of professional sports teams, they also have an amazing new electrolyte sparkling water. And with every purchase, you'll get a free sample pack to try out their classic drink mix flavors. I'm talking about the amazing electrolytes from LMNT. And as always, LMNT has a no questions asked, money back guarantee. So you have nothing to lose and only better hydration, performance, immune system function, and overall performance to gain. Go to [drinklmnt.com/model](https://drinklmnt.com/model) to take advantage of this right now. That's drink L M N T.com/model to get your free sample pack with any purchase, including their new electrolyte sparkling water. Again, go to [drinklmnt.com/model](https://drinklmnt.com/model). And now back to the show.

**SHAWN STEVENSON:** Got to think about what those foods are signaling, right? So we're talking about today, a satiety hormone or collection of satiety hormones with GLP one, but. What is it signaling for what we're going to discover more hunger related hormones as well when you're eating.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** You know a pop tart or you're eating some Doritos or you're eating or drinking, you know, Pepsi or whatever the case might be. What kind of chemistry what signals is that sending your hormones and your neurotransmitters and your cells to react to?

**DR. TAZ BHATIA:** Well, there's so much going on there, right? Like, you're writing the highs and lows of blood sugar with many of these foods. The organic Pop Tarts, or the cereals, or the processed foods, the fast foods. Basically, you're writing the highs and lows. So, you're not, studies, there's so many studies that show there's a lack of satisfaction. You don't feel full or satisfied. And I think the other side of that is that blood sugar goes up, blood sugar comes

crashing back down, and it does so very quickly, rather than a nice steady state. And in that high and quick low, again, you kind of feel bad, so again, you're searching for something to medicate with.

And so you reach for it again, you know, so the chemistry that's involved with foods that don't naturally produce GLP 1 is really centered around high circulating blood sugar levels in, well, in the blood, right? And not being able to produce the insulin to take up that blood sugar and move it so that we just kind of feel nice and even. And with those highs and lows of blood sugar, You have changes again in dopamine levels, which is the feel good neurotransmitter, right? So it's almost like you're getting a dopamine hit when the sugars get into the right place, and then you're down again, and then you need another hit, you know? So we have become addicted to foods that, you know, don't naturally produced GLP 1 at a steady state.

That's really what we're at, or in a sweet spot. That's the other word I like to use a lot. So we've got dopamine involved. We have serotonin, the anxiety epidemic, right? Some anxiety is blood sugar. I find that over and over again in practice, that it's the highs and lows of blood sugar that are actually triggering anxiety rather than anxiety necessarily being a standalone and that ties us back to serotonin. And then we've got like the whole hormonal fallout, right. We've talked about hormones before, but there's a whole hormonal piece to this. When blood sugar is going up and down, we have more stored estrogen. We gradually see testosterone dropping. We see changes in progesterone levels. We see changes in thyroid, you know? So again, this thing, you know, has massive consequences when we think about body chemistry and how it's playing together.

**SHAWN STEVENSON:** Yeah, what you shared it's so simple, but it's so powerful, you know, you mentioned this protein signaling. We're getting in adequate amounts of protein and you mentioned fiber and this cannot be overstated. You know, and we've got really great data on this. Actually, you know just now I was looking at this a certain type of Prebiotic fiber called inulin.

**DR. TAZ BHATIA:** Yes.

**SHAWN STEVENSON:** Fascinating studies is published in the journal Gut. An inulin derived propionate was found to significantly increase the release of GLP 1. Are you kidding me? And guess what a great source of this inulin is? Asparagus.

**DR. TAZ BHATIA:** Yes. Oh, I love asparagus. You know, it's the, so that takes us into another aspect of this. So naturally producing GLP 1 is a lot about the gut bacteria and one of the gut bacteria that has been found to be deficient and seems to improve production of GLP 1 is something called acromantia. So we're seeing a lot of supplementation of acromantia right now. And the reason acromantia is helpful is it secretes a protein that rehabs the gut lining, which then allows better production of GLP 1. This idea of the gut lining, right, that takes you all the way back to the earliest conversations around leaky gut, malabsorption, whatever you want to call it. But that gut lining has to be intact. And unfortunately, the other modern day sort of gift is that for the majority of people between stress, between food quality, even between pharmaceutical medications, right?

That gut lining is getting destroyed. So that's another factor that's taking down our GLP 1. So the other thing we're thinking about with food, you know, protein, yes, fiber, yes. But what's gonna give us more microbial diversity? What can naturally increase something like Akkermansia or the other bacteria that are involved in this equation like lactobacillus bifidobacteria and more. And that's where in 2014, it seems like forever ago I wrote a book, the 21 Day Belly Fix, and we talked a lot about the importance of the gut and the gut microbiome. And one of the ways to increase something like acromantia or lactobacillus or bifidobacteria ties you definitely back to protein and fiber, but also encourages a lot of fermented foods in the diet.

So taking in things like, you know, kefir or bone broth or eating sourdough bread over, you know, over a regular bread, but really fermented sourdough bread, not something sitting on the grocery store shelf. You know, I had a question on social the other day about pickles and pickle juice. Well, fermented too, you know, so some of these fermented products are providing some of this bacteria that's necessary for adequate production of glp1. So after I always say you graduate first, you kind of get the protein part down like okay, am I, am I getting the protein and are my numbers right?



Am I getting the intervals? Right? Then you start looking at fiber critically and Quite honestly, nobody's getting enough fiber. I have, you know, men and women coming in every day. I'm like, I eat all these salads. Salads are actually very low fiber unless you're consciously trying to add the right fruits and vegetables to it, right? Better choice than maybe a pasta or bread, but still not getting the fiber that's needed today to help you metabolize and to produce GLP 1. And so once you kind of graduate from that, then moving on and hey, am I getting at least maybe three to five servings of fermented foods in my diet every day. That's kind of the next level of diving into food so that you can manage those bacteria that are involved in GLP one signaling. Super important.

**SHAWN STEVENSON:** So good. So simple. All right. So we've, if people are looking for. What are some foods that are backed by science that can support GLP one and other, again, It's not just hitting one note.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** So other satiety related hormones.

**DR. TAZ BHATIA:** Right.

**SHAWN STEVENSON:** Avocado. We mentioned avocados. We checked off asparagus. Now, the next one is fermented foods.

**DR. TAZ BHATIA:** Fermented foods is a good one.

**SHAWN STEVENSON:** Which is a broad category. Tons of different options here within this. You mentioned pickles.

**DR. TAZ BHATIA:** Kiefer. Sourdough bread.

**SHAWN STEVENSON:** Sourdough bread.

**DR. TAZ BHATIA:** Yep.

**SHAWN STEVENSON:** Kimchi.

**DR. TAZ BHATIA:** Kimchi is a good one. Sauerkraut.

**SHAWN STEVENSON:** Kimchi is popping out here. All right, it's popping out here. You know what's, It's interesting that, you know, I didn't realize this until years after working at a university.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** But while I was working at my university that I graduated from, I got to work with people from all over the world. And eventually learning about fermented foods, which I didn't mess with any of that stuff as a kid. My mom would eat sauerkraut. I just thought she was a super weird, like, what is wrong with you? But I, I start to ask people about, do they have fermented foods? And every single, not a single person who was connected to their culture from where, you know, the country they came from. Every culture has something. Cultured foods.

**DR. TAZ BHATIA:** They have something. Yeah.

**SHAWN STEVENSON:** Right. Why does it call cultured foods?

**DR. TAZ BHATIA:** I love that.

**SHAWN STEVENSON:** So, yeah, and like, whether it's Ethiopia, whether it's the Iceland, whether it was, you know, uh, Japan.

**DR. TAZ BHATIA:** India. They make paneer. My mom used to make her own yogurt. Like, all of that is cultured food.

**SHAWN STEVENSON:** Our ancestors figured something out for us and we're just like, ah, I'm good, you know? And you know, I want to ask you about this because if people are hearing this and like, I'm not eating no damn kimchi, you know? Some fermented foods do come with,

they come, they have a bite to them, right? So what are some ways we can incorporate some more fermented foods into our diet?

**DR. TAZ BHATIA:** I mean, there's so many, you know, first of all, yogurt is a fermented food, you know, so a high quality yogurt is something you can do if you're not ready to go the kimchi route. And, you know, there's so many different ways to do it. I think, you know, learning first about just choosing the right fruits and vegetables. And you can actually ferment your own foods, too I mean you can literally take your favorite vegetable you can add a little bit of apple cider vinegar and a little bit of olive oil to it. Put it together, let it sit for a day. That's a fermented food. You're indirectly producing bacteria that's beneficial now. You probably don't want to let that sit for more than a day or two at the most but that's one way of tackling that. Bone broth is one that a lot of people like. It's simple, easy to digest, right? So a lot of people will choose that as their source of fermented foods.

But I think, again, the idea around this is just food variety, food quality in the toolbox of fermented foods. Just pick one or two that you like. And you've mentioned a bunch and they're more like there's paneer. That's a big Indian concept. There's halloumi that's in the Middle East, that's actually fermented as well. You know, we've talked about sauerkraut a couple of times. Russians have certain different drinks too, but there's so many. So I think pick one and just kind of, kind of play with it and see if you can get acclimated to it over time.

**SHAWN STEVENSON:** I love that. So the, an easy on ramp, especially in our culture is the yogurt route.

**DR. TAZ BHATIA:** I think yogurt and bone broth. I feel like those are the two easiest.

**SHAWN STEVENSON:** What about, is there any yogurt do's and don'ts?

**DR. TAZ BHATIA:** There's always yogurt do's and don'ts, so you don't want.

**SHAWN STEVENSON:** Can I get some go-gurt?

**DR. TAZ BHATIA:** No go-gurt, no yogurt with, you know, all this added sugar and all this added stuff to it. You know, I mean, just pick a high quality, ideally plain yogurt and you add the toppings, that's going to be the healthiest yogurt for you or learn to, you know, it's fun to make this stuff too, you know, if you have the bandwidth for it, like you can make your own yogurts, you know, you can make many of these different things at home and that way you're not always buying everything off the shelf.

**SHAWN STEVENSON:** Yeah, and you could ferment a bunch of different stuff, make yogurts out of, there's, you know, same thing with kefir. There's like coconut kefir. So many ways to go about it.

**DR. TAZ BHATIA:** Almond, almond milk. You can make almond milk yogurt, but there are many different.

**SHAWN STEVENSON:** I love that also because it's something that you could, you know, throw into a smoothie or, you know, get creative, make your little parfaits and things like that.

**DR. TAZ BHATIA:** Yes, yeah.

**SHAWN STEVENSON:** So I love that. And also, the reason I'm asking this too is that, When we get into the fermented veggie side.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** It's checking off more box. Now we got the fiber as well, coming along.

**DR. TAZ BHATIA:** I'm not kidding. You can literally take like broccoli or, you know, okra, add a little bit of vinegar, add a little bit of olive oil, put your favorite salt on it, let it sit for at least 24 hours. That's fermented. It doesn't have to be hard. You know.

**SHAWN STEVENSON:** I was just with hanging out with my wife and you know, some people love sushi right here. It's like people are obsessed.

**DR. TAZ BHATIA:** Yeah.

**SHAWN STEVENSON:** All right.

**DR. TAZ BHATIA:** Sushi is kind of good.

**SHAWN STEVENSON:** And now with that said people love it so much they'll just get it any random place and I can't even I just, I just can't. I can't understand it.

**DR. TAZ BHATIA:** Yeah

**SHAWN STEVENSON:** So anyways, we're having some tempura right? And there's kimchi that came along with it. Super nice place, all sourced well, all the things. And I got an experience which I've had before. But just like this is where it comes in at you have a little bit of the kimchi with this meal along, even with the bite, right. It adds this new dynamic to it because previously once I found out, you know 15 20 years ago about some of these benefits. I was just like Raw dog and kimchi, you know, just like taking it straight, you know what I mean? And it's not always easy for people to get invited into. You know, so that's why I was asking about how people can incorporate and also same with sauerkraut, there's a bunch of traditional dishes that you don't just eat sauerkraut out the jar, which I can actually easily do now. I kind of like it, but adding it with other meals.

**DR. TAZ BHATIA:** Totally. And mixing things up a little bit. I mean, again, I think we think about food, unfortunately, or some of these things is prescriptive. But I would say, just have fun with it. You know, like what can you make like get in the kitchen and kind of have fun, you know, playing with these textures and flavors, all of them made sense. I would think about sushi, think about sushi. They serve. They usually serve sushi with that fermented ginger. And there's a reason for that, right? And that's another one we didn't talk about. That's an easy one to just fermenting ginger, but ginger does a couple of different things. It helps with digestion. It provides digestive enzymes. It's actually one of those bile acid binders to helping to move something like raw fish move through your belly, right. And then when it's fermented, you're getting some bacteria from that as well.

**SHAWN STEVENSON:** So checking again, our ancestors figured out.

**DR. TAZ BHATIA:** Checking off all the boxes. Yeah.

**SHAWN STEVENSON:** Protection along with things as well. So we've got if you're looking for what are some foods that we've got some science on that can support glp1 avocado, asparagus, fermented foods. I'm gonna throw one more in here for everybody and this is one of the coolest studies I've ever seen actually. This is what was in a journal of research in medical sciences and they put participants on a matching calorie diet for three months.

All right. But there's one big difference. One group included in their diet almonds while the other group did not. And after the data was compiled at the end of the study, the folks who included almonds in their diet, listen to this, lost twice as much weight and had a greater reduction in their hip to waist ratio than those in the almond free group. Now listen to this. The researchers found a greater improvement in insulin sensitivity and in the satiety hormone, GLP 1 in the Almond Group.

**DR. TAZ BHATIA:** Shocking.

**SHAWN STEVENSON:** How cool is that?

**DR. TAZ BHATIA:** So neat.

**SHAWN STEVENSON:** So amazing. You know, again, the same, this is what you were talking about earlier. Again, the calories in, calories out paradigm. Yes, it's a thing. That exists. But what are your hormones doing? Right. How is your body relating with this stuff?

**DR. TAZ BHATIA:** Quality, right? Again, quality, like what, every meal is an opportunity to bring some of these high quality foods in. And maybe that's the challenge, like how can you make what you eat higher quality and just leveling up a little bit.

**SHAWN STEVENSON:** I love that. So one of the things that you're talking about now, again, this, the paradigm has shifted so fast with GLP 1 medications and, you know, just hanging out

watching a basketball game with my son, you know, we're seeing drug ads for it, just like, it's, it's crazy and it happens so fast. And there is obviously, you being a holistic physician, you're looking at all the tools in the toolkit and not eschewing medications and also not looking to this as the first line of treatment for patients. And so something that you've been talking about is microdosing of GLP 1s. Can you talk a little bit about that?

**DR. TAZ BHATIA:** I would love to. So, you know, again, the challenge with the GLP 1 medications for not just our patients, but for many people that I talk to is that they did see results. They saw the results, but once that medication stopped, all that weight came right back. And remember, the motivation to start a GLP 1 medication is not just weight, even though that's the one we're all fixated on, right? Because it's the one that's the most obvious or tangible. But You know, when we're talking about metabolic health and really resetting metabolic health, we're talking about visceral fat, belly fat, cardiovascular health. And there's an element too that's involved in cognitive health and brain health as well. So, and then of course, blood sugar and diabetes. So we're talking about all of that. We're not just talking about weight. So conventionally at regular dosing of our current family of GLP 1 medications because there are about four or five on the market now.

They're, they're many different ones and they do different things. So conventional dosing, you know, is set at certain levels. And the intention is that you go up every four weeks or every eight weeks to the next level. And the expectation is that over the course of four to five months, sometimes after six months, you'll lose weight at these conventional levels. And metabolic markers would shift as well. So all of that is incredible in theory, if it was just a six month journey. But what has truly played out is that in the time that people are on conventional and by conventional, I mean the regular standard dosing of this particular family of medications is that there were a lot of side effects.

There was everything from mild side effects, like I've got reflux or my stomach hurts or I'm constipated to more severe side effects where I'm having anxiety, I'm having heart palpitations, you know, I can't sleep at night to disruption, quite honestly, and all the other hormone levels. You know, so, you know, it has multiple, multiple ramifications. And then now there are more studies like kind of linking GLP 1 medications to thyroid cancer and stuff like

that. So we're seeing, we're seeing stuff come out, right? It's new. It's starting to come out. We're not going to know the full sort of scope of what standard dosing of GLP one medications does.

Here's where, you know, I've landed in this conversation, right? I too was very wary as a holistic and integrated position of this medication. I was like, fundamentally, if we're trying to change metabolic health, it never happens quickly. And anytime we go for the short, when it is usually just bad. It's a short win and all that weight comes right back and you're usually back at square one. And so I'm watching, and I'm listening to all of this stuff and I'm, you know, also watching my patients struggle, right? So you've got people from all walks of life at all different ages and stages, whether they're, you know, postpartum or they are, you know, in perimenopause or menopause, or you have men experiencing andropause, you know, you name it, like really trying hard with this diet and exercise and movement and trying to manage all the variables of their health.

And as we know, it's not easy to make change, right? It's very, very hard to like institute all the changes that need to happen. It doesn't happen overnight. But what I found were that many people, when we talked about this is how you eat, this is how you move. These might be the herbs or supplements to take to support your natural GLP one, you know, production and to help us move these metabolic markers would not see changes, you know, for six months, nine months, sometimes up to a year. And while that sounds frustrating, even the medication is not really giving us changes for four to six months. And so if you're telling somebody that they've got a one year or two year or three year journey, To get to their point of success, that's really demotivating, really demotivating.

And so for me, as I'm watching and listening and hearing everyone's stories, looking at their numbers and trying to, trying to figure out what, what can I do to help? You know, that's where this idea of microdosing came and I'd been seeing a few people talk about it. We talked to our pharmacist. We, you know, work with some compounding pharmacies and they mentioned it. And I very hesitantly, I have to be honest, very hesitantly started prescribing it for our patients, and it was a game changer. And it was a game changer in the sense that there was not sudden weight loss and there was not massive weight loss. But what patients



described was there's, was this very gradual dialing down of inflammatory symptoms they were experiencing, whether it was water retention or a puffy face or joint pain.

They were also noticing that they could regulate themselves a little bit better. They were still hungry and that was the game changer, right? Between a conventional dosing and microdosing. Everyone is still hungry on a microdose, but not hungry to the point of no return, not hungry to where, Oh my gosh, I overate, and now I can't backtrack from that. And they were not having the GI side effects. We were not seeing the constipation and the reflux and some of these things that people have been complaining about when they go on these medications. So for me, you know, first patient does okay, second patient does okay, okay, I'm going to try this a little bit more and I'm going to go dig into, you know, what's happening out there in the community.

First of all, there's not a ton of research around microdosing. The majority of research, if we're going to use research as the sword that we're going to fall on, is around conventional dosing. But I've always pushed back on that because I feel like the exam room really tells the true story. So what we're seeing in the exam room is that A1C levels, or the average of somebody's blood sugar over three months, were going down. Cholesterol levels were going down. Again, their appetite in general and their inflammatory responses was also going down. And so we set out to continue to watch those numbers and see how people felt. And it was fascinating the difference between people on standard dosing and the difference in people on microdosing.

The folks that were microdosing were able to come back to me and say, I want to space this out more. Instead of taking this shot every week, which is how it's traditionally prescribed, I'd like to go 10 days or 14 days. Or maybe even just do it once a month. And I'm like, fine, let's give it a try, see what happens. And they got to where they could recognize, oh my gosh, my cues are off. Remember hunger, satiety, feeling okay, you know, versus ravenous all the time and thinking about food all the time. And by the way, that's real, that food noise and thinking about food and avoiding food and trying to deal with food.

That's a very real issue for folks. But for the people that were being microdosed, they were better able to control that on off switch. Then the folks that were on conventional dosing, the folks on conventional dosing were all in or all out. There was no in between. And that's very much how conventional medicine kind of works, right? It's the hammer or it's nothing, you know? And so what we found that folks that were doing the conventional or their standard dosing, they can't come off. The minute they start to come off, the weight starts to pile back on and they actually start to have this very emotional response to that, right? It was, Oh my gosh, I'm going to, it's all going to come back.

It's all going to start back over again. So they're much harder. to take off this medication. Whereas with microdosing, you're working with a holistic metabolic plan, right? You're working with all the determinants of metabolic health, which are gut health, hormone health, mental health, cortisol and stress management, environmental health and toxicity, right? We can work with all those determinants. And the folks that are conventional dosing, first of all, they're losing weight rapidly. You know, even though they say four to six months, many of them are losing it very quickly. So they're, they're demotivated in a different way. They're not motivated to look at all the other determinants of health.

**SHAWN STEVENSON:** Right.

**DR. TAZ BHATIA:** Right. They think why, what, why, you know.

**SHAWN STEVENSON:** Their positions generally, unfortunately, that educated on those.

**DR. TAZ BHATIA:** They're not educated. And so this, this is reinforced, but then they're kind of married to that medication for a long period of time.

**SHAWN STEVENSON:** It's a strong.

**DR. TAZ BHATIA:** So now what are we doing? What are we doing to the gut? What are we doing to the hormones? You know, what's happening? Once you get to a health, there's a healthy weight, right? So if you're obese and a conventional GLP 1 got you to a healthy weight, that's a win. right?

But after that, what? You got there, now what? Are we going to think about all the other determinants of health? Are we going to look at that? Oftentimes the answer is no. When you microdose, you're forced to have that conversation. You know, you're forced to really look at that and then kind of in your head be like, I'm not on this forever. The other difference between the two is something we haven't talked about, which is really important to talk about, is your metabolic set point, right?

With any diet, whether we're talking about GLP 1s or we're talking about something, you know, something else, all of us have a metabolic set point. When we start to calorie restrict significantly, which is what happens with conventional dosing, we are lowering over time that metabolic set point. So yes, we lose weight, but then we also train the gut brain and the rest of our body and metabolic hormones that this is all we need to survive and eat. So the minute we go above that metabolic set point a little bit, we start to gain the weight back. With slower, more deliberate weight loss, when you're managing all the determinants of health, you're lowering that metabolic set point very gradually. So there's not this rebound phenomenon, you know, right?

The minute you go off this medication. So, you know, I've gone from, this is scary. I don't like these medications. I don't want to prescribe these medications. I want nothing to do with them to like, wait a minute, if we microdose, we're actually seeing some benefits. And here's what microdosing has done to me as a clinician and as a practitioner. We need to be microdosing all medications. We need to be adopting this mentality, whether it's cholesterol medication, blood pressure medication, and antidepressants and anxiety medication. We shouldn't be bringing sledgehammers in and shutting things down and then looking at a research study and saying, well, the research said, blah, blah, blah, blah, blah, blah.

The research is a singular view on your health, which is. Multiple determinants and multi focused and multi factorial. So to really adopt a true science based approach to health, whether it's metabolic health, hormone health, children's health, whatever you and I end up talking about. There's a place for medications and pharmaceuticals, but I think that place is in microdosing and thinking through smaller doses and altered dose schedules, rather than constantly bombarding everybody with these heavy handed doses that they become very

dependent on and almost in a way disempowering the human body from healing and doing the work.

But it needs to do, because the other thing I can vouch for is that we're actually like self healing, self rebooting machines when things are happening in the right direction, but the sledgehammer approach doesn't allow that healing journey to take place. So, you know, long answer to, I like microdosing and yes, I'll microdose patients and choosing the medication in the GLP 1 is dependent on the circumstances that we're dealing with. There's some that are better for people that are just struggling with blood sugar management. There's some that are better for cardiovascular health and those determinants of metabolic health and some that are fine for just pure weight loss. But it comes into the picture when we want to think holistically after we've at least tried To tackle diet, exercise, cortisol, toxic load, hormone balance. What's next? If you're not seeing changes in results, what's next might be a microdose GLP 1.

**SHAWN STEVENSON:** You know, this just seems much more logical, much more sustainable and You know, we do have a culture, we've got to understand the mindset of our culture, which is.

**DR. TAZ BHATIA:** Right, fix me now.

**SHAWN STEVENSON:** We've believed in this magic pill.

**DR. TAZ BHATIA:** I know.

**SHAWN STEVENSON:** You know, um.

**DR. TAZ BHATIA:** We've got to change. That's what's driving up healthcare costs. That's what's driving, that's what's creating the disease burden. You know, I get it. I understand. I'm very empathetic to that we all want the quick fix, but we have to somewhere along the way embrace this journey and understand that, that it's bigger than that. You know, and just enter wherever you're ready. You might be only ready to have a conversation around food.

Or you might be ready to really look at your hormones, right? Or you may be like, okay, I'm gonna focus on sleep. It doesn't matter. Just enter the chat, please, you know, because your body's kind of begging you to. You know, and the pharmaceuticals are there as a guide and maybe as an aid and maybe something to push things along a little bit faster than just trying to go it alone.

Like I meet so many patients, right? Like my patients are like all natural. Not doing any medication, coming off my thyroid, coming off everything. And then they flounder, right? So that's not right either. You know, so let's bring it all together, you know, and have a well thought out strategic approach, a strategic plan for you, just like you would for your business or your family or for anybody else. But you need one for you and just decide what you're going to start first and understand that GOP ones may have a role if you're dealing with metabolic health and you're frustrated and struggling. But I would vote for the micro dosed role because then we can unload and offload as we want to without sort of this side effect up and down and weight coming back and everything going haywire.

**SHAWN STEVENSON:** One of the most powerful, you've said a lot of powerful things, but one of the most powerful is a strategic plan for yourself.

**DR. TAZ BHATIA:** Yes.

**SHAWN STEVENSON:** So, working with a practitioner who's actually paying attention to you, and what a concept. And also understanding that, you know, your needs are going to change over time as well and being able to pick up tools and get yourself educated along the way. And also understanding catering things for you is going to involve all these other pieces that you've talked about. Whereas we also have a paradigm where this is becoming standard of care, including for children. Coming in, blunt instrument, hit your system, not accounting for all these other lifestyle factors. Wondering why we have all of this chaos and also the long term dependency and there are ways to utilize. We have so many tools at our disposal today, but we're treating ourselves, we're allowing ourselves to be treated like we're all one in the same, like we're just coming off the factory line. And so there isn't a magic pill, but there is a magic process. And..

**DR. TAZ BHATIA:** I love that. I might steal that from you. I love that.

**SHAWN STEVENSON:** That's going to incorporate the factors that you need for you right now. The foods that you need, the movement that you need, the sleep that you need, the relationships you need. We are dynamic. We have all these things about us and if we're not paying attention to these and then trying to just force things with one instrument, chances are it's not going to end well, and we've got to wake up to that. And also get ourselves educated. You've got it's so much incredible education available for people. Your most recent book the hormone shift is out there. It's a must have. You can pick that up anywhere books are sold and also, where can people follow you, get more information. You just started a show as well.

**DR. TAZ BHATIA:** I did start a show.

**SHAWN STEVENSON:** Let's talk about that.

**DR. TAZ BHATIA:** Definitely. Well, the show is Whole Plus and it's all about bringing all the different determinants of health together, bringing Eastern medicine and Western medicine together, bringing holistic, integrative and functional medicine together and even bringing in the wellness community as well. And, you know, I've spent a lot of time in this space and I've watched everybody divide up again, right? And what I really want to bring it all back together. That's why it's called whole plus where we're holistic, but we're really looking at all of it. We're not like this conversation right here. We're not opposed to writing a prescription or thinking about the right preventive screens and really adhering to kind of what we learned in med school and through our educational systems, right?

So the show is whole plus, and we have amazing guests talking about many of the different determinants of health. We're talking a lot about the science of health and wellness and medicine, but also about the human spirit. Because the two are connected. I very much believe in the five bodies where we have multiple layers to ourselves that are involved in a healing journey. So we're going to be bringing guests in that can address all of that, but it's not just about the show. We are launching a digital platform that will be live in the next

month or two, where it is full of resources. You can take one of our assessments and really learn. How to begin this holistic journey, what your starting point might need to be.

You'll be able to join a holistic health community at a nominal fee where we'll be teaching and lecturing on a weekly basis. You'll learn from others and be able to exchange ideas and information. You know what worked for you. I have this, that type of thing. My provider team that's been running our clinics over the last, you know, 15 years or so, we'll be joining me in that and partaking in giving some of that advice and counsel. And then of course we have our whole, you know, place of resources and guides and all the different things that we know over time have worked patient after patient. We've probably collectively seen about 60, 000 patients across our location. So we know that a lot of what we're talking about works.

We've done it. We've done the hard work. So my hope with Whole Plus is that it's an on ramp for everybody to start having these conversations with themselves and then come into our digital platform, maybe that's their first step, and really start that learning and healing journey. And then if you do want to be a patient, that'll be an option as well. We have a telehealth platform and then we have four clinic locations across the country. So really excited about seeing all of this come alive and more importantly seeing it come together. So that no matter where you are, whether you just want to read an article or you want to watch a YouTube video or you're ready to kind of learn a little bit more about yourself or you're ready to be a patient, you have an option.

**SHAWN STEVENSON:** Amazing. Amazing. And we'll put all the links for everything for everybody in the show notes. So make sure to check that out. And you know, again, just hanging out with you is always an easy yes. You know, I love this.

**DR. TAZ BHATIA:** Thank you! I love it.

**SHAWN STEVENSON:** Love hanging out with you and I appreciate you so much. You know, you're sharing your wisdom and, you know, you just keep up leveling things as well. Finding new creative ways to reach people, to impact people. You've obviously got a huge heart to be able to make a big change. So thank you. Appreciate that.

**DR. TAZ BHATIA:** It's a mission. It needs all of us, but thank you. Thank you again for having me. Yeah, it's my pleasure.

**SHAWN STEVENSON:** Dr. Taz, everybody. Thank you so very much for tuning into this episode today. I hope that you got a lot of value out of this. We got to get this conversation out there. All right. I need you. I need to connect. Please share this out with the people that you care about, share it out on social media over on IG, pop over to IG. Share a screenshot of the show. Tag Dr. Taz. Tag me. I'm back. I'm hanging out on social media again. I took some time off. I drop in here or there. But, you know, it's just such a heavy year this past year. And just taking some time to recalibrate and You know, to really find a way to up level this mission of health and wellness. A lot of cool things are taking place right now, but it's still such a turbulent time.

And, I've got so much that I've learned over this past year and I cannot wait to share them with you. And, you know, it's really, when it boils down to it, it's all about our relationships and being able to cultivate. And connect and to support healthy relationships to uplift each other to support each other and also to support ourselves, to share love and support for oneself. You know, there's this new paradigm new part of our lexicon self love self care, but What does that mean? And so that's what we're gonna be talking about more this year as well. But again, I love to see it I would love to see the love for this episode So if you have it in your heart If you could take a moment to take a screenshot and share it out with your friends and family over on Instagram, I'm definitely going to keep an eye out for it.

And, I appreciate you so much. We've got some amazing, amazing masterclasses and world class guests coming your way very, very soon. So make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon. And for more after the show, make sure to head over to [themodelhealthshow.com](http://themodelhealthshow.com). That's where you can find all of the show notes. You can find transcriptions, videos for each episode. And if you've got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome. And I appreciate that so much and take care. I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.